

ABSTRACT

The subject process comprises providing chemical pulp and an  $E_{op}$  and/or  $E_p$  aqueous bleaching solution. The  $E_{op}$  aqueous bleaching solution comprises a peroxide compound, an oxygen-containing material, sodium hydroxide and 5 magnesium hydroxide, in the absence of magnesium sulfate. Alternatively, the  $E_{op}$  aqueous chemical solution for bleaching chemical pulp comprises an  $E_{op}$  aqueous bleaching solution consisting essentially of a peroxide compound, an oxygen-containing material, sodium hydroxide and magnesium hydroxide.

In any case, the chemical pulp is bleached with the  $E_{op}$  aqueous bleaching solution 10 to form a bleached chemical pulp. The  $E_p$  aqueous bleaching solution comprises a peroxide compound, sodium hydroxide and magnesium hydroxide, in the absence of magnesium sulfate. Alternatively, the  $E_p$  aqueous bleaching solution consists essentially of a peroxide compound, sodium hydroxide and magnesium hydroxide.

In any case, the chemical pulp is bleached with the  $E_{op}$  and/or  $E_p$  aqueous 15 bleaching solution to form a bleached chemical pulp as part of an overall chemical pulp bleaching sequence.